

### **Abstract**

A disk drive includes recording media having one or more recording surfaces, one or more transducer heads positionable relative to the recording surfaces by an actuator operating within a head position servo loop, and a data transfer driver. A preamplifier in the

5 data transfer driver includes one or more head interfaces, each head interface for controlling a transducer head for read and write operations, and a mode controller for controlling each head interface based on configuration information for selectively (i) reading data from at least one recording surface, (ii) writing data to at least one recording surface, and (iii) simultaneously reading data (such as a reference pattern) from at least one recording

10 surface and writing data (such as servo patterns) to at least one recording surface.